

**Title II, Part D: Enhancing Education Through Technology
COMPETITIVE GRANT PROGRAM – 2010-2011 SCHOOL YEAR**

Supporting the REAL WORLD DESIGN CHALLENGE ‘10-‘11

GENERAL INFORMATION:

The purpose of the Title II, Part D (Enhancing Education Through Technology) competitive grant program is to provide modest financial assistance to schools with high poverty and the greatest need for technology support and/or schools identified for improvement.

TIMELINE FOR SUPPORTING REAL WORLD DESIGN CHALLENGE RFP	
Application Release	March 1, 2010
Submission Deadline (Received in VT DOE)	April 2, 2009 4:00 PM
Award Announcements	April 9, 2009
Project Implementation	May 15, 2010 - June 30, 2011

SUPPORTING REAL WORLD DESIGN CHALLENGE GRANT

The focus of this grant is to select an entity to manage and lead the 2010-11 version of the Real World Design Challenge. Vermont was involved in the pilot year of this program in 2008 and 09. One of our Vermont schools went on to the national competition in Washington DC in both '09 and '10. This grant program is seeking someone to coordinate summer and fall trainings to schools, visit and support those schools taking part in the challenge and representing Vermont in the continued work the challenge represents. This grant represents a commitment in Vermont to supporting STEM (Science, Technology, Engineering, and Math) initiatives. One grant award of \$75,000 will be made to an eligible individual or entity that can provide the needed leadership.

BACKGROUND:

The Real World Design Challenge was begun in 2008 with a partnership between the US Department of Energy and Parametric Technology Corporation (PTC) based in Massachusetts. 10 states were involved in the pilot year of this program. Vermont was very fortunate to be one of those states initially involved. We wish to continue this involvement. Students that took part in the program learned valuable skills in math, science, and computer aided drafting programs. Schools that took part were given valuable software and training to get the student program rolling. Students were also given software to use on home computers as well. The intent of the program is to rebuild the ranks of students throughout the U.S. that are addressing Science, Technology, Math and Engineering skills (STEM). There is tremendous support for this initiative through the Lt. Governor's office here in Vermont. One expectation of the grant program will be to keep this office posted on the process and progress. For complete information, along with photos of teams that competed in '09 and '10, visit this website: <http://www.realworlddesignchallenge.org>

ELIGIBILITY:

For purposes of this grant, a high need LEA must be selected to receive the funding. If the LEA is not directly involved with completing the work, there must be a clear relationship, (contract,

memorandum of understanding, etc.) between the LEA and the entity or individual doing the actual work.

One grant award will be made to an eligible local partnership on behalf of eligible high-need Vermont schools, or school districts/supervisory unions (LEA's).

For purposes of this competition, a "high-need local educational agency" is an LEA that:

- Includes one or more schools with the highest numbers and percentages in the state of children from low-income families, and
- Serves one or more schools identified for improvement or corrective action under NCLB (§1116), or
- Has a substantial need for assistance in acquiring and using technology.

For more details on eligibility refer to Appendix A.

GRANT PROGRAM AREA

NOTE: APPLICATIONS MUST FOLLOW THE FORMAT AND CONTENT REQUIREMENTS AS FOUND ON PAGE 4.

1. SCOPE OF WORK:

Grantee should plan and reflect in a proposal the following scope of work:

- Aggressive recruitment of schools that can take part in the challenge. Ideally, at *least* ten sites can take advantage of the program this year.
- Recruitment and coordination of state and private entity mentors that can lend valuable assistance to the student teams across the state (some have already been involved).
- Effort at making the statewide representation fair and equitable.
- Dissemination, coordination of software and tools necessary for competing in the challenge.
- Coordination of training efforts, both online and with live trainers at school sites especially for summer trainings.
- Regular conference call discussions with Design Challenge planners and staff.
- On-site visits to schools working on the project during the Challenge calendar. When possible, these visits can provide additional learning materials, food for students, expert consultant advice, general support.
- Coordination and recruitment of judges for the state judging portion which takes place in early January.
- Coordination of Vermont prizes for those schools that partake of the challenge.
- Coordination, attendance, final reporting on the National Challenge, if Vermont is invited.
- Active involvement of press and releases in a timely fashion
- Coordination with Vermont Department of Education personnel on getting word out to schools on status of the program.

A. Expectations/Outcomes:

- a. Expectation: Vermont is a viable challenge candidate with multiple schools to choose national contestant from.
- b. Expectation: Press releases reflect focus on STEM within Vermont and how the program is addressing this need.
- c. Expectation: Grantee avails themselves of current initiatives within Vermont that could support the challenge in additional ways. i.e. Learning Network of Vermont, our videoconferencing network.
- d. Expectation: 25% of grant funds *must* be used on professional development. The training segment should cover this amount.
- e. Expectation: Grantee should develop a Vermont focus wiki or web site that can reflect the activities of the program to the field.
- f. Expectation: Grantee coordinates with the Vermont Department of Education to share information with the Lt. Governor's office. (Ongoing support from this office has been crucial)
- g. Expectation: Grantee should plan on presenting program to the Vermont community of STEM educators in some fashion, as well as present at Dynamic Landscapes in May of 2010.
- h. A minimum of 10% of the grant funds must be devoted to evaluation of the program.

B. The grant will support the following:

- i. Mileage, meals, stipends, coordinator expenses for individuals or entities involved in the work;
 - 1. Note: Travel to and from Washington, D.C. for the National Challenge is usually provided by the Challenge itself. This should not be figured into budget areas. Focus should be on Vermont-based activities. State coordinator reserves right to use RWDC funds to attend National.
- ii. This is NOT a hardware grant, though some limited hardware purchases will be allowed for the purposes of staff and coordinator work duties.
- iii. Books, materials, supplies, coffee and food for meetings or with students. Sign in sheets should be used to track attendance.
- iv. Funds for retaining qualified instructors for summer/fall trainings.

C. Grant Amount: The maximum amount of funds for which an LEA may apply is \$75,000. Depending on the status of the program for the following year, funding may be available. That will be determined after July 1, 2011.

D. Timeline: Award in mid April, funds available after May 15, 2010 and grant expiration June 30, 2011. Future funding will be contingent on first year results.

Please see the "Format and Content" section for information on how to structure the application starting on Page 4.

Application Format & Content

Total application should be **NO MORE THAN SIX (6) PAGES**, single-spaced, font sizes 10-12.

1. Abstract: Please provide a one paragraph abstract that describes the grant program.

2. Program Description (no more than 2 pages): Describe what entity will do to develop the following areas: **(50 Points)**

- Goals - Clear articulation of the Scope of Work and Expectations/Outcomes described in this RFP.
- Summarize the Scope of Work – Specific, bulleted list of the work to be performed and the products or outcomes of the project clearly articulated.
- Timeline – What will be completed, when?

3. Capacity for Success (no more than 1 page): Entities must clearly indicate how they can meet the statewide need described in this grant application. Describe why this is the right kind and size of project for your entity. Include such items as: **(20 Points)**

- Who (describe roles, not individual names please) will be responsible for conducting the work;
- What structures and procedures are already in place or proposed that will support this project and/or enhance its sustainability;
- Evidence that this plan is realistic and that the grantee has the capacity to achieve the objectives;

4. Evaluation (no more than 1 page): There will be an evaluation required for final reporting. A minimum of 10% of the grant award **must** be devoted to evaluation of the grant program. For purposes of the evaluation, the 10% should be set aside and will be paid to an entity that has been retained by the VT Department of Education for this purpose. The proposals should articulate the following:

- The critical questions that will need to be addressed over time;
- What impact is the program having on STEM education in Vermont?

5. Budget Narrative (no more than 1 page.): You must also complete the **SEPARATE BUDGET PAGE.** The budget narrative should demonstrate a logical connection to the expectations described (above), and should be specific enough to give reviewers an idea of your priorities and focus for funding. The narrative should include: **(10 Points)**

- Justification for the major expenditures proposed.
- Explanation of any items on the budget sheet that might not be completely clear to a reader.

Submission Process

All proposals must include an Original plus TWO (2) copies (Faxed or e-mailed applications will NOT be accepted) with:

- Proposal Cover Page with superintendent's signature
- Abstract: A brief paragraph describing the overall grant program.
- Content of Application as noted on page 4
- Budget Page and Narrative

Application Deadline: Original plus two (2) copies of proposals must be received by the Vermont Department of Education no later than **4:00 p.m. on April 2, 2010**. Mail to:

Title II, Part D Technology Grants – Real World Design Challenge
Peter Drescher
Vermont State Department of Education
120 State Street
Montpelier, Vermont 05620-2501

Electronic copies will be requested from each applicant after April 2nd. The request for this electronic copy signifies the receipt of the mailed-in copy. Do not send the application electronically until requested.

Selection Process: All proposals will be read and reviewed by a select review panel. Scoring will be done using the rubric indicated.

Scoring Rubric: Enhancing Education Through Technology

Criteria	Poor	Average	Excellent
Program Description – Describe what grantee will do with the funds if received. In addition to a clear description of the activities to be undertaken, points will be assigned for: (50 Points) <ul style="list-style-type: none"> • <i>Is Scope of Work clearly articulated?</i> • <i>Are the expectations and outcomes met that support the Scope?</i> 	0 – 17	18 – 35	36 – 50
Program Description – Total Score (MAX is 50):			
Capacity for Success - Describe why this is the right kind and size of plan for your entity, and what structures are in place to support it?: (20 Points) <ul style="list-style-type: none"> • <i>Have the parties responsible for conducting the work been identified?</i> • <i>Are structures, resources, policies, and procedures in place or proposed?</i> • <i>Has the equitable statewide nature of this grant been addressed?</i> • <i>Is the plan realistic? Does capacity exist to achieve objectives?</i> 	0 – 6	7 – 13	14 – 20
Capacity for Success – Total Score (MAX is 20):			
Evaluation - Describe the process you will follow to focus and possibly adjust to meet the expectations: (20 Points) <ul style="list-style-type: none"> • <i>Are the primary focus areas and specific measurements identified?</i> • <i>Are mechanisms in place to self- evaluate as the work progresses?</i> 	0 – 6	7 – 13	14 – 20
Evaluation – Total Score (MAX is 20):			
Budget Narrative and Page – The budget should demonstrate a logical connection to the areas described above, and should be specific enough to give reviewers an idea of your priorities and focus for funding. (10 Points) <ul style="list-style-type: none"> • <i>Is justification for major expenditures reasonable?</i> • <i>Explanation of items that won't be immediately obvious to someone reading your proposal for the first time</i> 	0 – 3	4 – 7	8 – 10
Budget – Total Score (MAX is 10):			
TOTAL SCORE (MAX IS 100)	_____		

Budget Page

Grant Area

Support for Real World Design Challenge

Budget (Describe as appropriate)	TOTAL
Professional Development (25% minimum at least \$18,750.00)	
Evaluation (10%)	\$7500.00
Salary & Wages	
Hardware	
Software	
Travel	
Consultants & Contracts	
Teacher Stipends	
Equipment	
Publicity, Student outreach	
Other (equipment rental, printing)	
TOTAL	

☐ Please use Budget Narrative page to elaborate and/or describe further

**Title II, Part D: Enhancing Education Through Technology
Competitive Grant Program – 2009-10**

PROPOSAL COVER PAGE

School District or SU			
Contact Person			
Phone			
Fax			
E-mail			
Grant Program Area	Supporting Real World Design Challenge <input type="checkbox"/>		
List all schools for which this proposal applies	<u>Schools</u> This is a statewide focus	<u>Grade Spans</u>	<u>Enrollment</u> (To be completed by VT DOE)
Total Funds Requested			
CIPA Certification	Superintendent has certified CIPA compliance (Check one or more): ___ on school technology plans ___ on last E-Rate application ___ on 2008 Consolidated E-Application		
Superintendent's Signature			
Date			

APPENDIX A

Additional Details on Eligibility for Title IID

An “eligible local partnership” is a partnership that includes at least one high-need LEA *and* at least one of the following –

- An LEA that can demonstrate that teachers in its schools are effectively integrating technology and proven teaching practices into instruction, based on a review of relevant research, and that the integration results in improvement in classroom instruction and in helping students meet challenging academic standards.
- An institution of higher education that is in full compliance with the reporting requirements of section 207(f) of the Higher Education Act of 1965, as amended, and that has not been identified by the State as low-performing under that act.
- A for-profit business or organization that develops, designs, manufactures, or produces technology products or services or has substantial expertise in the application of technology in instruction.
- A public or private nonprofit organization with demonstrated expertise in the application of educational technology in instruction.
- An individual with demonstrated expertise and capacity to lead the initiative and address expectations listed below.

REQUIREMENTS: For an LEA to receive funding under this program:

- All schools in the LEA *must* have a current “Educational Technology Plan” approved by the Department of Education through June 30, 2009, and be developing a new plan for the upcoming 2009-2012 plan period.
- Must participate in the annual “Technology Indicators Data Collection” conducted by the Department of Education.
- Must certify that all “high-needs” schools in the LEA meet requirements under the Children’s Internet Protection Act.

Must use a minimum of twenty-five percent (25%) of these funds for ongoing, sustained, intensive, high-quality professional development in integrating and using advanced technologies in instruction and in new learning environments to:

- a. Educate regional groups on current theories and practices in education technology as related to STEM education.
- b. Build capacity in regions around current best practices in skill sets required of students in 21st Century schools.
- c. Lead to better awareness and practice on said methods of instruction.

*Note: This grant has inherent professional development encompassing a good portion of the project.

Private School Participation - LEAs or partnerships must engage private school officials with whom they consult for Title I purposes during the development and implementation of competitive Title II-D programs. If this grant application is applicable to these circumstances, be prepared to supply documentation.

For information on finding an eligible LEA to act as fiscal agent, contact Peter Drescher at (802) 828-5149 or peter.drescher@state.vt.us.